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PATENT APPLICATION  
10/004,095

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IN THE CLAIMS

For the convenience of the Examiner, all pending claims of the present Application are shown below.

1. (Currently Amended) A communication system comprising:

one or more line cards each operable to receive at least one packet comprising an identifier associated with at least one of a plurality of destination elements, each line card comprising control circuitry operable to generate a control signal comprising control information;

one or more optical transmitters each associated with one of the one or more line cards and each operable to generate at a specified wavelength an optical signal comprising at least a portion of the at least one packet received by the line card associated with that optical transmitter, the optical signal further comprising and at least a portion of the control information of the control signal from generated by the control circuitry of the line card associated with that optical transmitter; and

a receiver associated with one of the one or more line cards and operable to receive an upstream optical signal from the plurality of destination elements;

a star communicating fabric operable to receive the optical signals from the one or more optical transmitters and to communicate to each of the plurality of destination elements a substantially similar set of at least some of the optical signals, wherein the at least a portion of the control information of the optical signal is communicated to each of the plurality of destination elements through the star communicating fabric in a same direction as the optical signals;

wherein each of the plurality of destination elements comprise a filter coupled to a destination receiver and a destination transmitter, the destination receiver operable to receive at least a fraction of the optical signals, the destination elements operable to, based at least in part on the control information of the optical signal, signal, perform an operation to generate the upstream optical signal that is transmitted by the destination transmitter, the destination elements coupled to the star communicating fabric, which communicates at least a fraction of the upstream optical signal to the receiver associated with the one of the line cards.